



The new foundation for Fort Carson's tank trail water-crossing consists of 44 strips of used tank track, each 20 feet wide by 100 feet long and weighing 1,600 pounds.

Tank Tracks Become Erosion Solution

FORT Carson, Colo., officials are using old, unserviceable tank tracks to control erosion on the installation.

With help from the U.S. Army Corps of Engineers and its contractors, officials built a new tank trail water-crossing. The Corps' Construction Engineering and Research Laboratory is using the crossing as a test bed to help build stable, hardened stream crossings that can withstand traffic pressures and watershed impacts, and resist erosion, said Gwyn Howard, a research biologist at CERL.

Pipe culverts had often collapsed at the stream crossing, which serves users ranging from active-duty and Reserve

units to trainers exercising police dogs, officials said.

Builders had to excavate concrete, rubble and soil to prepare the site for the crossing, Howard said. The new foundation consists of 44 strips of used tank track, each 20 feet wide by 100 feet long and weighing 1,600 pounds. Cable, also salvaged from the Defense Reutilization Management Office, holds the strips together.

Unserviceable tank tracks aren't easy to recycle, said Bruce Miller, a range conservationist at the post.

"The combination of rubber fused to iron makes it unfit for the recycling process. If we didn't use them in projects like this, they'd be a liability that would take up space in a landfill." — Susan C. Galentine-Ketchum, Fort Carson

Erosion Control Supports Airborne Readiness

FOR many years engineers at Fort Bragg, N.C., kept the Sicily drop zone clear by "discing" the soil, much as a farmer would turn a field for planting. But the installation didn't plant anything.

The result: "We've had massive erosion at our drop zones, and it was affecting training as well as harming the environment," said Fort Bragg soil conservationist Jennings Craig Lance.

SFC Patrick Mackery, of the 3rd Special Forces Group, said he remembers the washouts and gullies on the drop zone. "Because of those, our paratroopers suffered a lot of ankle and back injuries, and foot trauma, especially from mishaps that occurred at night."

The erosion was so bad that

Research Bolsters Chesapeake Bay's Health

ARMY research into beds of submerged aquatic vegetation at Aberdeen Proving Ground, Md., has directly linked the underwater meadows to the health of Chesapeake Bay.

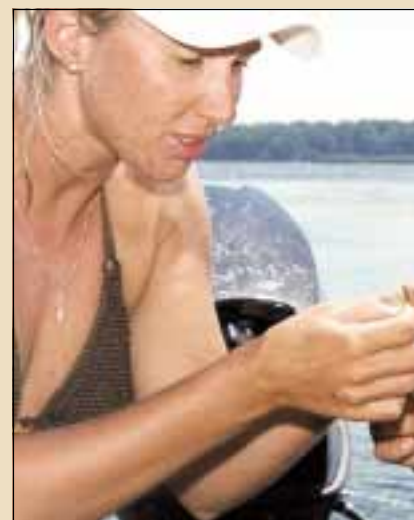
With 19 installations in the Chesapeake watershed, the Army is dedicated to the bay's protection and restoration.

Last summer the U.S. Army Environmental Center at Aberdeen Proving Ground, on the shore of the upper Chesapeake, led a study to examine the effects of different water-quality characteristics on the growth of

three native species — water stargrass, wild celery and red-head grass.

Researchers planted nearly 2,400 plants. Environmental agencies will use the findings to evaluate future preservation actions. — USAEC

The recent study at Aberdeen Proving Ground linked Chesapeake Bay's health directly to the presence of submerged aquatic vegetation.



the state cited Fort Bragg for it in 1994. Sand and clay had eroded from the drop zone and fouled nearby streams, filled adjacent wetlands and threatened the habitat of the endangered red-cockaded woodpecker. Lance said 90 percent of the drop zone's 1,000 acres were eroded at that time.

The solution was to prevent water from running down the drop zone's hillsides. So the installation created a series of terraces and planted hardy, quick-growing grass at the site. The size of the terraces depended upon the amount of excess water that needed to be controlled in any particular area. At the same time, conservationists had to build the terraces with gentle slopes, to prevent additional hazards for the paratroopers.

"Once the vegetation flourished, the gullies disappeared," Lance said.

"Today, I know the troops are much happier with conditions at the drop zone," he said. "We hear only positive comments when we talk to the drop zone safety officers and jumpmasters," said Lance.



Soil conservationist Jennings Craig Lance examines erosion gullies at Fort Bragg's Sicily drop zone. Terraces and quick-growing grasses ultimately solved the erosion problem.

"High-altitude, low-opening jumps require 250 to 500 meters of clear ground," added Mackery. Sicily DZ is now perfect for conducting those jumps. — *Robert DiMichele, U.S. Army Environmental Center*

Army Tackles Historic Family Housing Dilemma

ARMY Department of Engineering and Housing officials have found a way to avoid headaches over historical preservation.

Family quarters built between 1949 and 1962 are called Capehart- and Wherry-Era housing, for the two senators who sponsored legislation to solve a desperate need for military-family housing.

The Army still owns more than 19,000 of these aging buildings, and most are occupied. But within the next 10 years all Capehart-Wherry

housing will fall under the protection of the National Historic Properties Act. The act requires an extensive review process before renovation, rehabilitation, privatization or demolition. This review process can be time-consuming and expensive for installations that want to improve housing conditions.

Working with state preservation officers and other groups, USAEC officials will conduct a once-for-all review of Capehart-Wherry housing to avoid a project-by-project review at every installation.

Today, much as in the Capehart and Wherry era, the Army faces a family housing problem, this time due to aging infrastructure. The Army Family Housing Master Plan indicates 70 percent of Army family housing is inadequate, and this is having a significant effect on soldiers' quality of life.

The Capehart-Wherry "programmatic compliance approach" will eliminate delays in upgrading housing and save the Army several million dollars in installation compliance costs. — *David Guldenzopf, USAEC*



Aberdeen Proving Ground is just one installation that is still home to Capehart-Wherry family housing units.



Please send contributions or questions concerning Environmental Front to Neal Snyder, U.S. Army Environmental Center, 5179 Hoadley Road, Attn: SFIM-AEC-PA, Bldg. 4460, Aberdeen Proving Ground, MD 21010-5401, e-mail Environmental.Update@aec.apgea.army.mil. Telephone: (410) 436-2556 or (DSN) 584-2556.